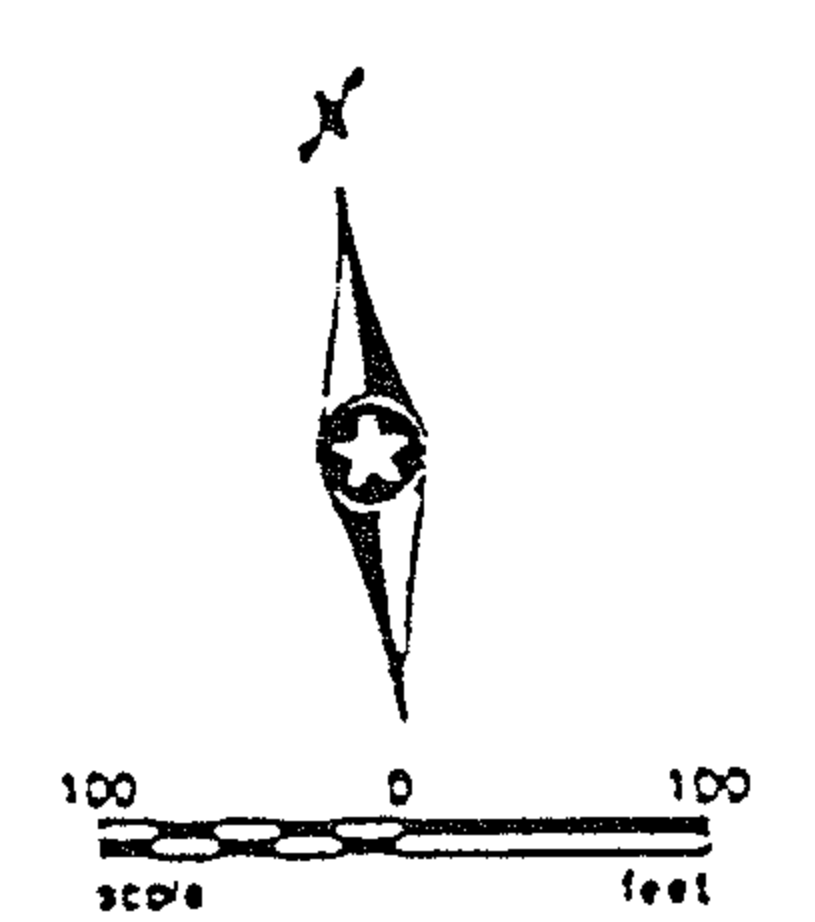


**LEGEND**

- PAD MOUNTED FEED POINT (240/480V)
- PULLBOX (HANDHOLE)
- CONDUIT CONSTRUCTED AS PART OF BRIDGE CONSTRUCTION
- NON-METALLIC CONDUIT (2" DIA. UNLESS NOTED OTHERWISE)
- DIRECT BURIED ARMORED POWER CABLE
- ⊙ HIGH MAST LIGHTING UNIT WITH NO. OF LUMINAIRES AND ORIENTATION
- ⊙ UNDERPASS LIGHT
- BRIDGE MOUNTED SIGN
- OVERHEAD SIGN



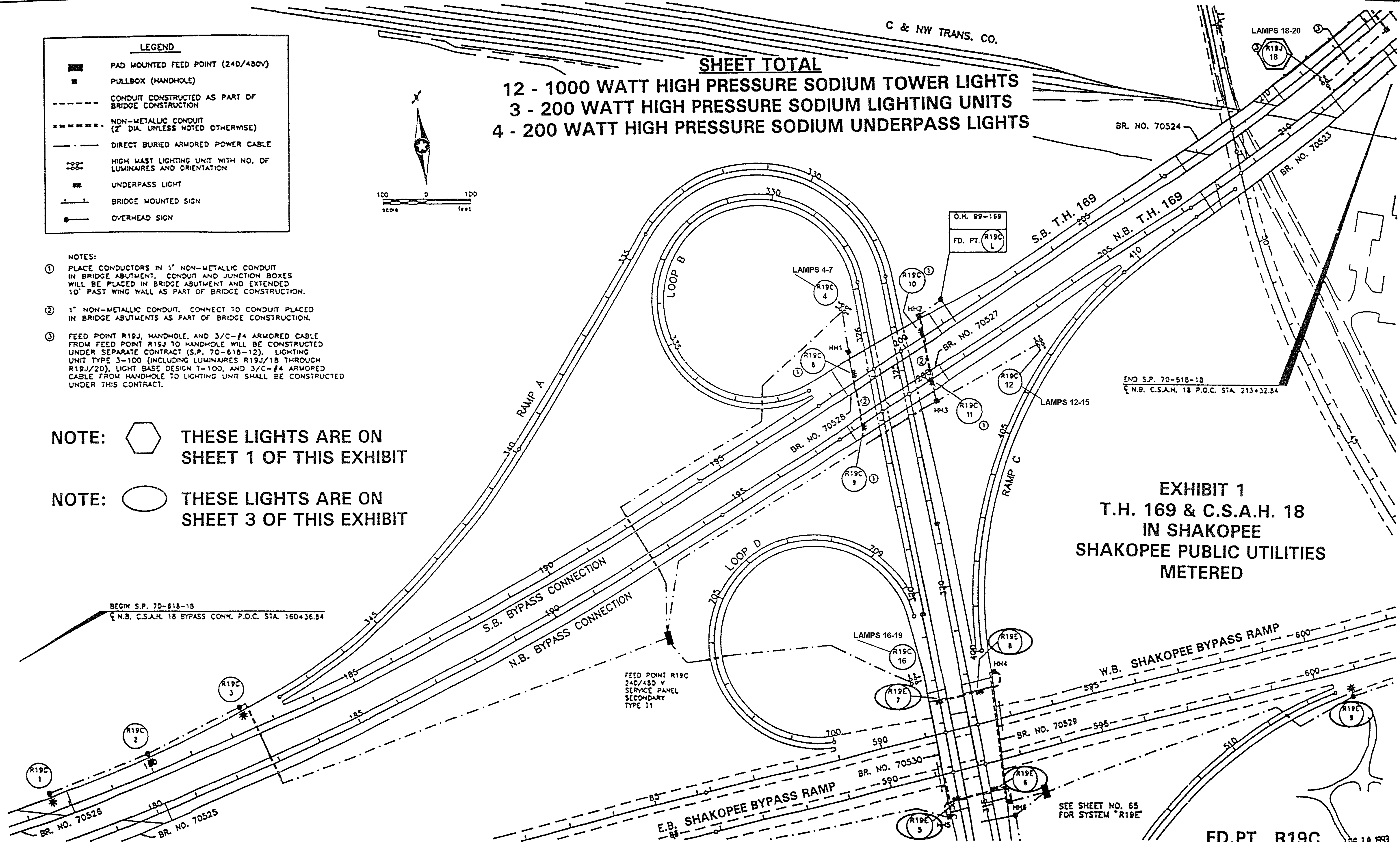
**SHEET TOTAL**

12 - 1000 WATT HIGH PRESSURE SODIUM TOWER LIGHTS  
 3 - 200 WATT HIGH PRESSURE SODIUM LIGHTING UNITS  
 4 - 200 WATT HIGH PRESSURE SODIUM UNDERPASS LIGHTS

- NOTES:**
- ① PLACE CONDUCTORS IN 1" NON-METALLIC CONDUIT IN BRIDGE ABUTMENT. CONDUIT AND JUNCTION BOXES WILL BE PLACED IN BRIDGE ABUTMENT AND EXTENDED 10' PAST WING WALL AS PART OF BRIDGE CONSTRUCTION.
  - ② 1" NON-METALLIC CONDUIT. CONNECT TO CONDUIT PLACED IN BRIDGE ABUTMENTS AS PART OF BRIDGE CONSTRUCTION.
  - ③ FEED POINT R19J, HANDHOLE, AND 3/C-#4 ARMORED CABLE FROM FEED POINT R19J TO HANDHOLE WILL BE CONSTRUCTED UNDER SEPARATE CONTRACT (S.P. 70-618-12). LIGHTING UNIT TYPE 3-100 (INCLUDING LUMINAIRES R19J/18 THROUGH R19J/20), LIGHT BASE DESIGN T-100, AND 3/C-#4 ARMORED CABLE FROM HANDHOLE TO LIGHTING UNIT SHALL BE CONSTRUCTED UNDER THIS CONTRACT.

**NOTE:** THESE LIGHTS ARE ON SHEET 1 OF THIS EXHIBIT

**NOTE:** THESE LIGHTS ARE ON SHEET 3 OF THIS EXHIBIT



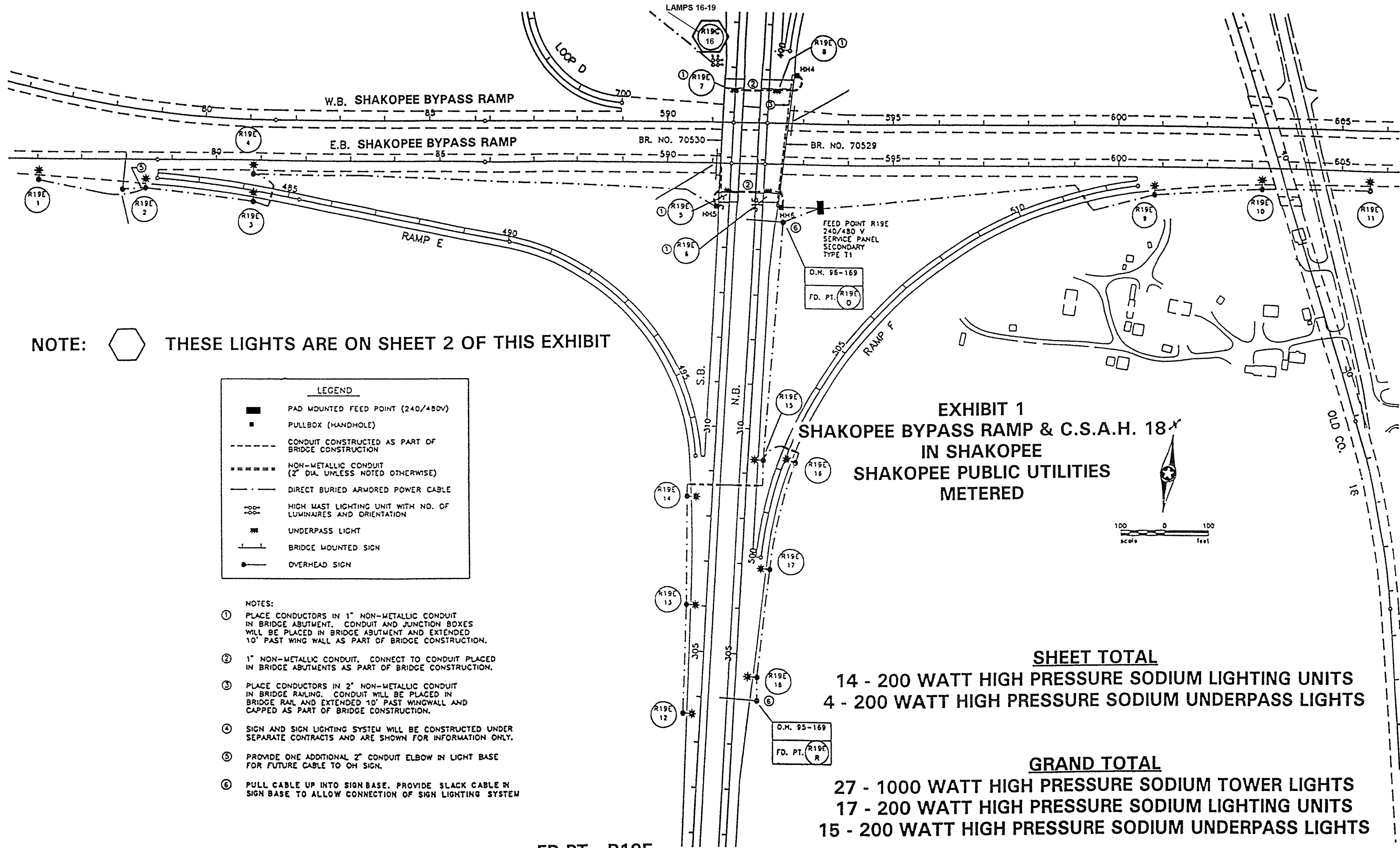
**EXHIBIT 1**  
**T.H. 169 & C.S.A.H. 18**  
**IN SHAKOPEE**  
**SHAKOPEE PUBLIC UTILITIES**  
**METERED**

BEGIN S.P. 70-618-18  
 N.B. C.S.A.H. 18 BYPASS CONN. P.O.C. STA. 160+36.84

SEE SHEET NO. 65  
 FOR SYSTEM "R19E"

FD.PT. R19C 106 10 1993

				SCOTT COUNTY		DRAWN BY D. SYMANETZ 11-92		DATE 11-92		SHEET 2	
				T.H. 169		DESIGNED BY D. MICHALKO 11-92		DATE 11-92		OF 4	
				LIGHTING PLAN		CHECKED BY S.R. BROWN 12-92		DATE 12-92		CONTR. NO. 0201423	
				I hereby certify that the plan, specification or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.							
				Steven Rich Post							
				Date 05/28/93							
NO	DATE	BY	CHKD	APPR	REVISION						



NO	DATE	BY	CHKD	APPR	REVISION

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

*Steven Rick Brown*  
 Date: 05/28/92 Reg. No. 11502

SCOTT COUNTY

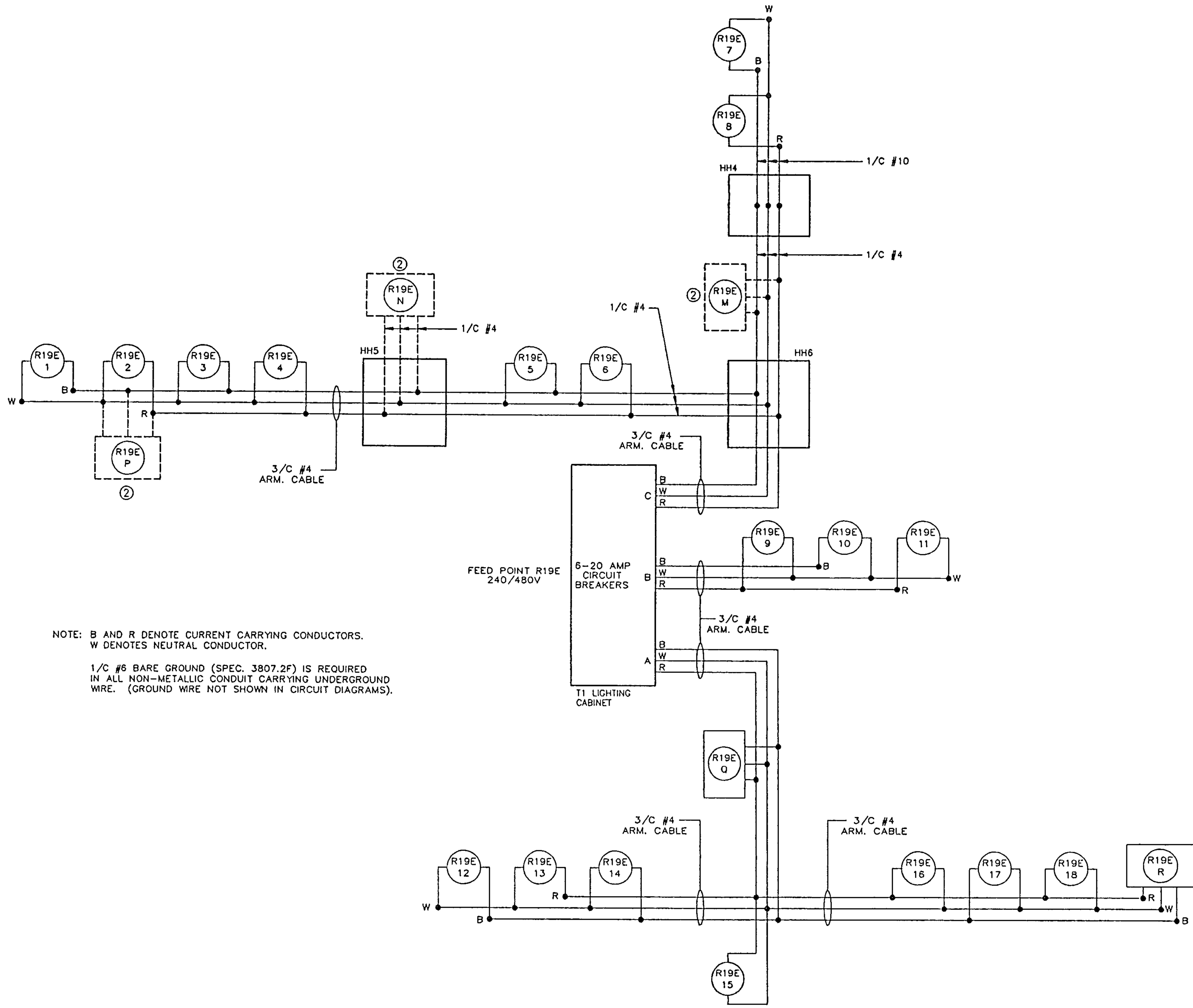
T.H. 169  
 LIGHTING PLAN

DRAWN BY D. SYMANETZ	DATE 11-92	SHEET 3
DESIGNED BY D. MICHALKO	DATE 11-92	OF 4
CHECKED BY S.R. BROWN	DATE 12-92	CONTR. NO. 0901423

① LIGHTING SYSTEM "R19E"					
NO.	STATION	OFFSET	LOCATION	POLE TYPE	LUMINAIRE TYPE (1)
1	76+03	44' RT.	LEBREV	9-40	M-SC II
2	78+43	62' RT.	LEBREV	9-40	M-SC II
3	80+83	90' RT.	LEBREV	9-40	M-SC II
4	80+83	31' RT.	LEBREV	9-40	M-SC II
5	315+23	3' LT.	S.B. SCOTT C.S.A.H. 18 (S ABUTMENT BR 70530)		S-NC IV
6	315+27	9' RT.	N.B. SCOTT C.S.A.H. 18 (S ABUTMENT BR 70529)		S-NC IV
7	317+59	3' LT.	S.B. SCOTT C.S.A.H. 18 (N ABUTMENT BR 70530)		S-NC IV
8	317+58	18' RT.	N.B. SCOTT C.S.A.H. 18 (N ABUTMENT BR 70529)		S-NC IV
9	600+82	61' RT.	LSEB	9-40	M-SC II
10	603+22	45' RT.	LSEB	9-40	M-SC II
11	605+62	42' RT.	LSEB	9-40	M-SC II
12	303+61	39' LT.	S.B. SCOTT C.S.A.H. 18	9-40	M-SC II
13	306+01	44' LT.	S.B. SCOTT C.S.A.H. 18	9-40	M-SC II
14	308+41	56' LT.	S.B. SCOTT C.S.A.H. 18	9-40	M-SC II
15	309+31	31' RT.	N.B. SCOTT C.S.A.H. 18	9-40	M-SC II
16	309+31	105' RT.	N.B. SCOTT C.S.A.H. 18	9-40	M-SC II
17	306+91	62' RT.	N.B. SCOTT C.S.A.H. 18	9-40	M-SC II
18	304+51	46' RT.	N.B. SCOTT C.S.A.H. 18	9-40	M-SC II

ITEM	UNIT	ESTIMATED QUANTITY
1" NON-METALLIC CONDUIT	LIN. FT.	80
2" NON-METALLIC CONDUIT	LIN. FT.	260
ARMORED CABLE 3 COND NO. 4	LIN. FT.	5060
UNDERGROUND WIRE 1 COND NO. 4	LIN. FT.	1760
UNDERGROUND WIRE 1 COND NO. 6 (BARE)	LIN. FT.	800
UNDERGROUND WIRE 1 COND NO. 10	LIN. FT.	550
PULL BOX (HANDHOLE)	EACH	3
EQUIPMENT PAD	EACH	1
SERVICE PANEL SECONDARY TYPE T1-S-240	EACH	1
UNDERPASS LIGHTING UNIT TYPE L	EACH	4
LIGHTING UNIT TYPE 9-40	EACH	14
LIGHT BASE DESIGN E	EACH	14



NOTE: B AND R DENOTE CURRENT CARRYING CONDUCTORS.  
W DENOTES NEUTRAL CONDUCTOR.

1/C #6 BARE GROUND (SPEC. 3807.2F) IS REQUIRED  
IN ALL NON-METALLIC CONDUIT CARRYING UNDERGROUND  
WIRE. (GROUND WIRE NOT SHOWN IN CIRCUIT DIAGRAMS).

NOTE:

① ALL UNDER PASS LUMINAIRE ARE 200 W HIGH PRESSURE SODIUM

② SIGN AND SIGN LIGHTING SYSTEM WILL BE CONSTRUCTED UNDER  
SEPARATE CONTRACTS AND ARE SHOWN FOR INFORMATION ONLY.

T.H. 169, RAMP E & RAMP F

				I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota. <i>Steven Rick Brown</i> Date <u>05/28/92</u> Reg. No. <u>19548</u>		SCOTT COUNTY.		DRAWN BY DATE D. SYMANIETZ 11-92		SHEET 67	
						T.H. 169		DESIGNED BY D. MICHALKO 11-92		OF 179	
						ELECTRICAL LIGHTING SYSTEMS CIRCUITS FEED POINT R19E		CHECKED BY S.R. BROWN 12-92		COMM. NO. 0901423	
NO	DATE	BY	CKD	APPR	REVISION						